

A stability control system (24) for an automotive vehicle includes a plurality of sensors sensing the dynamic conditions of the vehicle. The controller (26) is coupled to the sensors. The controller (26) determines a lateral force in response to measured vehicle conditions, determines a slip angle in response to measured vehicle conditions, determines a first steering actuator angle change to decrease the slip angle until the lateral force increases, and thereafter determines a second steering actuator angle change to increase the slip angle until the lateral force decreases.

Figures